

AMENDMENTS TO THE CLAIMS

(IN FORMAT COMPLIANT WITH THE REVISED 37 CFR 1.121)

Please add new claims 17-20.

1. (CURRENTLY AMENDED) A method of bridging an incoming packet from a first network to a second network, the method comprising the steps of:

5 (A) reading a pointer for a first parameter within said incoming packet;

(B) processing said first parameter in accordance with said pointer to produce a second parameter; and

(C) presenting an outgoing packet containing said second parameter for said second network ~~in response to step (B)~~.

2. (CURRENTLY AMENDED) The method according to claim 1, further comprising the steps of:

reading a length and an offset for said first parameter;
and

5 partitioning said incoming packet in accordance with said ~~offsets~~ offset and said ~~lengths~~ length to extract said first parameter prior to processing.

3. (ORIGINAL) The method according to claim 2, further comprising the step of downloading said offset, said length, and said pointer prior to reading.

4. (ORIGINAL) The method according to claim 1, further comprising the steps of:

routing said first parameter to at least one of a plurality of peripheral blocks identified by said pointer prior to processing, wherein said peripheral blocks perform said processing;
5 and
and

assembling said second parameter into said outgoing packet in response to processing.

5. (ORIGINAL) The method according to claim 4, further comprising the step of reading a second offset and a second length for a second network protocol prior to assembling said outgoing packet.

6. (ORIGINAL) The method according to claim 4, further comprising the step of routing said first parameter to an external peripheral block identified by said pointer prior to processing, wherein said external peripheral block performs said processing.

7. (ORIGINAL) The method according to claim 1, wherein
step (B) is at least two processes of a content addressable memory
process, a time to live process, a comparison process, a counter
process, a value swapping process, a stuffing process, a de-
stuffing process, a cyclic redundancy checksum process, a parity
process, a first-in-first-out process, a length construction
generator process, a header error control synchronization process,
a frame relay lookup process, a data link connection identifier
process, a protocol identification analysis process, a point-to-
point protocol verification process, a parameter discard process,
and a buffer process.

8. (CURRENTLY AMENDED) The method according to claim 1,
wherein step (B) ~~is~~ comprises the sub-step of simultaneously
processing a plurality of ~~first~~ parameters within said incoming
packet.

9. (ORIGINAL) The method according to claim 1, wherein
step (B) is non-programmable.

10. (ORIGINAL) The method according to claim 1, further
comprising the step of delineating a receive frame from said first
network to produce said incoming packet prior to processing.

11. (ORIGINAL) The method according to claim 10, further comprising the step of selecting among a plurality of frame delineation methods for a plurality of network protocols prior to delineating.

12. (ORIGINAL) The method according to claim 10, further comprising the step of delineating a second receive frame from said second network to produce said incoming packet.

13. (ORIGINAL) The method according to claim 1, further comprising the step of framing said outgoing packet to produce a transmit frame for said second network in response to presenting said outgoing packet.

14. (ORIGINAL) The method according to claim 13, further comprising the step of selecting among a plurality of framing methods for a plurality of network protocols prior to framing.

15. (ORIGINAL) The method according to claim 14, further comprising the step of framing said output packet to produce a second transmit frame for said first network in response to presenting said outgoing packet.

16. (ORIGINAL) A circuit comprising:

means for reading a pointer for a first parameter within
an incoming packet compliant with a network protocol;

means for processing said first parameter in accordance
5 with said pointer to produce a second parameter; and

means for presenting an outgoing packet containing said
second parameter.

17. (NEW) The circuit according to claim 16, wherein
said means for processing comprises means for partitioning said
incoming packet.

18. (NEW) The circuit according to claim 17, wherein
said means for processing further comprises a plurality of
peripheral means at least one (i) linked to said pointer and (ii)
configured to perform a process involving said first parameter.

19. (NEW) The circuit according to claim 18, wherein
said plurality of peripheral means comprises a first plurality of
said peripheral means internal to said means for processing and a
second plurality of said peripheral means external to said means
5 for processing.

20. (NEW) The circuit according to claim 19, further comprising means for interfacing to said first network configured to de-frame in compliance with a plurality of network protocols.